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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,294	06/07/2001	Stefan Fietkau	31512-172404 RK	4659

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EXAMINER	
TRAN, LOUIS B	
ART UNIT	**PAPER NUMBER**
3721	

DATE MAILED: 10/06/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/875,294	FIETKAU, STEFAN	
	Examiner	Art Unit	
	Louis B Tran	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-8 and 10-24* is/are pending in the application.

4a) Of the above claim(s) *19-23* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-8,10-18 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This action is in response to applicant's amendment, Paper No. 11, received on 08/04/2003. Applicant's cancellation of claims 1-3 and 9 in Paper No. 11 is acknowledged.

Election/Restrictions

2. This application contains claims 19-23 drawn to an invention nonelected with traverse in Paper No. 9. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 24, 4-8, 10-13, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greve (3,974,007) in view of Ramspeck et al. (5,194,115).

Greve discloses the invention substantially as claimed including a method of applying a flowable substance to a web of wrapping material for rod shaped products and confining the web 46 to movement along a predetermined path and directing on stream of flowable substance toward one side of the web as described in column 5, lines 35-40 (as in claim 24), advancing the web lengthwise along said path at a variable speed (as in claim 13).

Greve does not explicitly show method of directing at least one stream of flowable substance in an at least partially non-linear manner toward one side of the web to vary the direction of propagation of the flowable substance, wherein said directing step includes the utilization of a nozzle having an orifice which discharges the at least one stream of flowable substance, and includes rotating the stream, wherein said rotating step includes directing against the stream at least one flow of fluid substance, wherein said flow directing step includes causing the fluid substance to flow along a pre-selected path prior to and during issuance of the stream from the orifice of the nozzle.

However, Ramspeck et al. teaches the method of directing at least one stream of flowable substance 56 in an at least partially non-linear manner toward one side of the web to vary the direction of propagation of the flowable substance as seen in Figure 1 of Ramspeck et al., wherein said directing step includes the utilization of a nozzle 14 having an orifice 45 which discharges the at least one stream of flowable substance, and includes rotating the stream, wherein said rotating step includes directing against the stream at least one flow of fluid substance, wherein said flow directing step includes causing the fluid substance to flow along a pre-selected path prior to and during issuance of the stream from the orifice of the nozzle (as in claim 24), wherein the fluid substance is air (as in claim 4), wherein said stream directing step includes imparting to the stream the shape of a hollow cone having an apex in line with the orifice of the nozzle as seen in Figure 3 (as in claim 5), wherein the flow directing step includes causing the flow to impinge upon the stream at an acute angle as seen in Figure 3 (as in claim 6), wherein said angle is approximate 30 degrees as in column 4, line 35 (as in

claim 7), wherein said flow is substantially tangential to said cone as in Figure 2 and in column 4, line 58 (as in claim 8), where the step of pumping the flowable substance from a source to the orifice of the nozzle at variable pressure and providing an open and shut closure 23 for the orifice (as in claim 10), wherein said pumping step includes raising the pressure of the flowable substance to a predetermined value prior to opening of the orifice as inherent in the system (as in claim 11), wherein the non linear layer is a spiral layer seen in Figure 1 (as in claim 17), wherein the flowable substance is an adhesive (as in claim 18) for the purpose of generating consistent adhesive loops and spirals in bonding applications.

Therefore, it would have been obvious to one having ordinary skill in the art to simply incorporate the adhesive application of system of Ramspeck et al. into the rod shape making process of Greve in order to achieve improved adhesive consistency in the adhesive application step of Greve.

With respect to claim 12, the modified method of Greve discloses the invention except for explicitly stating that the opening of the orifice takes place approximately .5 seconds subsequent to the raising of the pressure. It would have been obvious to one having ordinary skill in the art at the time the invention was made to the open the orifice takes place approximately .5 seconds subsequent to raising of the pressure of flowable substance to said predetermined value, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).*

5. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greve (3,974,007) in view of Ramspeck et al. (5,194,115) in further view of Hall (4,987,854).

The modified method of Greve shows the invention substantially as claimed including the above description but does not explicitly show discharging the flowable substance from the orifice at a rate which is a function of the speed of advancement of the web along said predetermined path (as in claim 14) said step of discharging the flowable substance includes varying the rate of discharge of flowable substance proportionally with variations of speed of the web (as in claim 15), wherein said step of discharging the flowable substance includes discharging the flowable substance from the orifice at a rate of at least 2 gram per minute (as in claim 16).

However, Hall teaches the well known method of discharging the flowable substance from the orifice at a rate which is a function of the speed of advancement of the web along said predetermined path described in column 2, lines 1-18 (as in claim 14) said step of discharging the flowable substance includes varying the rate of discharge of flowable substance proportionally with variations of speed of the web as in column 2, lines 1-18 (as in claim 15), for the purpose of consistent distribution of fluid as in column 1, lines 15-25. Hall states that it is well known in the art to vary flow rates with work piece speeds.

Therefore, it would have been obvious to one having ordinary skill in the art to provide the modified method of Greve with the well-known concept of adjusting flow rate relative to work piece speeds.

The above references discloses the claimed invention except for explicitly showing wherein said step of discharging the flowable substance includes discharging the flowable substance from the orifice at a rate of at least 2 grams per minute (as in claim 16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a flow range of at least 2 grams per minute, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller, 105 USPQ 233.*

Conclusion

6. Applicant's remarks have been fully considered but are deemed non-persuasive. Applicant contends that Ramspeck fails to teach fluid substance flow prior to issuance of the stream from the orifice. Examiner contends that if the fluid substance does not flow prior to issuance from the stream Examiner contends that in order to form the adhesive bead into a descending spiral as it is ejected, as in column 1, lines 25-31, one could not have the bead dispense from the nozzle prior to air application as it would cause initial adhesive splatter. It is quite common in the art to employ air streams before dispensing fluid and it would certainly be understood by one of ordinary skill in the art.

Applicant also contends that Ramspeck fails to teach pumping substance to the nozzle at a variable pressure. Examiner draws the attention of the applicant to the general definition of "variable" since claims are given their broadest reasonable interpretation:

var·i·a·ble (vâr'ê-e-bel, vàr'-) *adjective*
Abbr. **var.**

1. a. Likely to change or vary; subject to variation; changeable.[1]

Inherently, as the substance is pumped to the nozzle there is changeable pressure which may be very slight but still can be described as variable pressure.

Applicant contends that Ramspeck does not inherently show the flowable substance being pressurized before the orifice is opened.

Examiner draws the attention of the applicant to column 3, lines 55-60 where Ramspeck et al. states, "a valve stem having a tapered valve surface for cooperating with a seat to shut off flow of adhesive from an adhesive chamber through the nozzle..". Clearly, in order for there to be appropriate flow, there must be a pressure differential between atmospheric pressure and the pressure inside the adhesive chamber.

Finally, applicant contends that claim 16 is beyond mere optimization as asserted by the examiner. Examiner maintains that finding an optimal flow rate from an orifice of 2 grams per minute is mere optimization.

For the reasons above, the grounds of rejection is deemed proper.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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[1] *The American Heritage® Dictionary of the English Language, Third Edition* copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from INSO Corporation; further reproduction

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis B Tran whose telephone number is 703-305-0611. The examiner can normally be reached on 8AM-6PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

lbt
09/30/2003

Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700